

Ref

OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

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OPINION 324

Addition to the *Official List of Generic Names in Zoology*
of the names of twenty-one nominal genera of Ammonites
(Class Cephalopoda, Order Ammonoidea) and matters
incidental thereto



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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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OPINION 324

ADDITION TO THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY" OF THE NAMES OF TWENTY-ONE NOMINAL GENERA OF AMMONITES (CLASS CEPHALOPODA, ORDER AMMONOIDEA) AND MATTERS INCIDENTAL THERETO

RULING : (1) The correct spelling of the name published both as *Oecotraustes* and as *Oekotraustes* by Waagen in 1869 is *Oecotraustes*.

(2) The correct spelling of the name published by Hyatt in 1877 as *Quenstedioceras* is *Quenstedtoceras*.

(3) The under-mentioned generic names are hereby placed on the *Official List of Generic Names in Zoology* as Name Nos. 770 to 790 respectively :—

- (a) *Agassiceras* Hyatt, 1875 (gender : neuter) (type species, by selection by Buckman (S.) (1894) : *Ammonites scipionianus* d'Orbigny, 1844)
- (b) *Angulaticeras* Quenstedt, 1883 (gender : neuter) (type species, by selection by Lange (1924) : *Ammonites lacunatus* Buckman (J.), 1844)
- (c) *Asteroceras* Hyatt, 1866 (gender : neuter) (type species, by selection by Buckman (S.), 1911 : *Ammonites stellaris* Sowerby (J.), 1815)
- (d) *Bigotites* Nicolesco, 1918 (gender : masculine) (type species, by selection by Nicolesco (1931) : *Bigotella petri* Nicolesco, 1917)
- (e) *Cadoceras* Fischer, 1882 (gender : neuter) (type species, by selection by Spath (1932) : *Ammonites sublaevis* Sowerby (J.), 1814)

- (f) *Cadomites* Munier-Chalmas, 1892 (gender : masculine) (type species, by original designation : *Ammonites deslongchampsii* d'Orbigny, 1846)
- (g) *Coroniceras* Hyatt, 1867 (gender : neuter) (type species, by selection by Bonarelli (1900) : *Ammonites kridion* Hehl, [1830])
- (h) *Echioceras* Bayle, 1878 (gender : neuter) (type species, by monotypy : *Ammonites raricostatus* Zieten, [1831])
- (i) *Garantiana* Mascke, 1907 (gender : feminine) (type species, by original designation : *Ammonites garantianus* d'Orbigny, 1846)
- (j) *Lamberticeras* Buckman (S.), 1920 (gender : neuter) (type species, by original designation : *Ammonites lamberti* Sowerby (J.), 1819)
- (k) *Ludwigella* Buckman (S.), 1901 (gender : feminine) (type species, by monotypy : *Ammonites concavus* Sowerby (J.), 1815)
- (l) *Oecotraustus* Waagen, 1869 (gender : masculine) (type species, by selection by Munier-Chalmas (1892) : *Oecotraustes genicularis* Waagen, 1869)
- (m) *Oppelia* Waagen, 1869 (gender : feminine) (type species, by selection by Douvillé (H.), (1884) : *Ammonites subradiatus* Sowerby (J. de C.), 1823)
- (n) *Phlyseogrammoceras* Buckman (S.), 1901 (gender : neuter) (type species, by monotypy : *Ammonites dispansus* Lycett, 1860)
- (o) *Pleuroceras* Hyatt, 1867 (gender : neuter) (type species, by selection by Fischer (1882) : *Ammonites spinatus* Bruguière, 1789)
- (p) *Pseudogrammoceras* Buckman (S.), 1901 (gender : neuter) (type species, by monotypy : *Ammonites struckmanni* Denckmann, 1887)

- (q) *Pseudoperisphinctes* Schindewolf, 1923 (gender : masculine) (type species, by monotypy : *Perisphinctes rotundatus* Roemer (J.), 1911)
- (r) *Psiloceras* Hyatt, 1867 (gender : neuter) (type species, by selection by Spath (1924) : *Ammonites planorbis* Sowerby (J. de C.), 1824)
- (s) *Quenstedtoceras* (emend. of *Quenstedioceras*) Hyatt, 1877 (gender : neuter) (type species, by monotypy : *Ammonites leachi* Sowerby (J.), 1819)
- (t) *Sigaloceras* Hyatt, 1900 (gender : neuter) (type species, by original designation : *Ammonites calloviensis* Sowerby (J.), 1815)
- (u) *Stephanoceras* Waagen, 1869 (gender : neuter) (type species, by selection by Buckman (S.) (1898) : *Ammonites humphriesianus* Sowerby (J. de C.), 1825).

(4) The under-mentioned names, being the specific names of the type species of the nominal genera enumerated in (3) above as there severally so specified, are hereby placed on the *Official List of Specific Names in Zoology* as Name Nos. 205 to 225 respectively :—(a) *calloviensis* Sowerby (J.), 1815, as published in the combination *Ammonites calloviensis* ; (b) *concavus* Sowerby (J.), 1815, as published in the combination *Ammonites concavus* ; (c) *deslongchampsii* d'Orbigny, 1846, as published in the combination *Ammonites deslongchampsii* ; (d) *dispansus* Lycett, 1860, as published in the combination *Ammonites dispansus* ; (e) *garantianus* d'Orbigny, 1846, as published in the combination *Ammonites garantianus* ; (f) *genicularis* Waagen, 1869, as published in the combination *Oecotraustes genicularis* ; (g) *humphriesianus* Sowerby (J. de C.), 1825, as published in the combination *Ammonites humphriesianus* ; (h) *kridion* Hehl in Zieten, [1830], as published in the combination *Ammonites kridion* ; (i) *lacunatus* Buckman (J.), 1844, as published in the combination *Ammonites lacunatus* ; (j) *lamberti* Sowerby (J.), 1818, as published in

the combination *Ammonites lamberti*; (k) *leachi* Sowerby (J.), 1819, as published in the combination *Ammonites leachi*; (l) *petri* Nicolesco, 1917, as published in the combination *Bigotella petri*; (m) *planorbis* Sowerby (J. de C.), 1824, as published in the combination *Ammonites planorbis*; (n) *raricostatus* Zieten, [1831], as published in the combination *Ammonites raricostatus*; (o) *rotundatus* Roemer (J.), 1911, as published in the combination *Perisphinctes rotundatus*; (p) *scipionianus* d'Orbigny, 1844, as published in the combination *Ammonites scipionianus*; (q) *spinatus* Bruguière, 1789, as published in the combination *Ammonites spinatus*; (r) *stellaris* Sowerby (J.), 1815, as published in the combination *Ammonites stellaris*; (s) *struckmanni* Denckmann, 1887, as published in the combination *Ammonites struckmanni*; (t) *sublaevis* Sowerby (J.), 1814, as published in the combination *Ammonites sublaevis*; (u) *subradiatus* Sowerby (J. de C.), 1823, as published in the combination *Ammonites subradiatus*.

(5) The under-mentioned generic names or alleged generic names are hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* as Name Nos. 189 to 197 respectively:—(a) *Bourkelamberticeras* Buckman (S.), 1920 (a junior objective synonym of *Lamberticeras* Buckman (S.), 1920); (b) *Garantia* Rollier, 1909 (an Invalid Emendation of *Garantiana* Mascke, 1907); (c) *Garantiana* Hyatt, 1900 (a *nomen nudum*); (d) *Lamberticeras* Kilian, 1910 (a *nomen nudum*); (e) *Oekotraustes* Waagen, 1869 (an Invalid Original Spelling of *Oecotraustes* Waagen, 1869); (f) *Paltopleuroceras* Buckman (S.), 1898 (a junior objective synonym of *Pleuroceras* Hyatt, 1867); (g) *Quenstedticeras* Teisseyre, 1889 (an Invalid Emendation of the defective form, *Quenstedioceras*, in which the name *Quenstedtoceras* Hyatt, 1877, was originally published); (h) *Quenstedioceras* Hyatt, 1877 (an Invalid Original Spelling of *Quenstedtoceras* Hyatt, 1877); (i) *Stepheoceras* Buckman (S.), 1898 (a junior objective synonym of *Stephanoceras* Waagen, 1869).

I.—THE STATEMENT OF THE CASE

On 20th September 1950, Dr. W. J. Arkell (*Sedgwick Museum, Cambridge University, Cambridge*) submitted a list of names of nominal genera of ammonites for admission to the *Official List of Generic Names in Zoology*. Correspondence ensued between the Secretary and Dr. Arkell in regard to various matters in connection with this application. These were concluded on 20th February 1951, when the following application was submitted :—

**Proposed addition to the “ Official List of Generic Names in Zoology ”
of the names of twenty-one genera of Jurassic Ammonites
(Class Cephalopoda, Order Ammonoidea) and matters
incidental thereto**

By W. J. ARKELL, M.A., D.Sc., F.R.S.
(*Sedgwick Museum, Cambridge University, Cambridge*)

1. I submit herewith to the International Commission on Zoological Nomenclature a list of the names of twenty-one genera of Jurassic ammonites which I recommend should be placed on the *Official List of Generic Names in Zoology*. Each of these names is an available name in the sense that it is not a homonym of any generic name previously published as the valid name of a genus in the Animal Kingdom. The species cited in the list now submitted as the type species of each of the genera in question is believed to have been correctly so determined in accordance with the provisions of Article 30 of the *Règles*, being the type species either by original designation (Rule (a)), or by monotypy (Rule (c)), or by subsequent selection (Rule (g)).

2. The twenty-one names now submitted have been selected because in the past there have been differences of opinion among specialists in regard either to the species which should be accepted as the type species of the genera concerned or to other questions relating to these names. In view of these inconsistencies in the literature, it is very desirable that the use of these names in the sense required by the *Règles* should be stabilised as soon as possible by these names being placed upon the *Official List* with their correct type species. The nature of the inconsistencies referred to above and the grounds on which it is considered that the solutions now recommended for recognition in the *Official List* are in strict accordance with the provisions of the *Règles*, is explained (so far as is necessary) in the series of notes given in the Appendix to the present application.

3. In seven cases, points calling for some special action arise. These cases are set out below :—

- (1) *Cadoceras* Fischer, 1882 : As explained in the Appendix, no valid type selection has ever been made for this genus. I accordingly now select, as its type species, *Ammonites sublaevis* Sowerby (J.), 1814 (= *Cadoceras sublaeve* (Sowerby, 1814)).
- (2) *Garantiana* Mascke, 1907 : Prior to the valid publication of this name by Mascke in 1907, it had been published as a *nomen nudum* by Hyatt in 1900 (in Eastman's *Zittel, Textb. Paleont.* 1 : 583). This invalid earlier use of the name *Garantiana* appears in Neave's *Nomenclator Zoologicus* (2 : 440), where its invalid status is correctly noted ; unfortunately, however, Mascke's valid use of this name is not noted in that work. It is desirable, therefore, that, in order to obviate the risk of future misunderstandings, the nomenclatorially non-existent name *Garantiana* Hyatt, 1900, should now be finally disposed of by being placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*. At the same time the uncalled-for emendation *Garantia* Rollier, 1909 (*Arch. Sci. phys. nat. Genève* (4) 28 : 613, 615) should also be placed on the *Official Index*. The type species of the genus *Garantiana* Mascke has been used as a zonal index fossil and is therefore of special importance in stratigraphy.
- (3) *Lamberticer*as Buckman (S.), 1920 : The name *Lamberticer*as was first published as a *nomen nudum* by Kilian in 1910 (*Lethaea geognostica* 3 (No. 1) (Lief. 2) : 194). Possessing no status in zoological nomenclature, the name *Lamberticer*as Kilian, 1910, does not invalidate the later name *Lamberticer*as Buckman, 1920. On erroneous information that the opposite was the case Buckman (1920, *Type Ammonites* 3 : 17) renamed his genus *Bourkelamberticer*as. Both the *nomen nudum* *Lamberticer*as Kilian, 1910, and the junior objective synonym *Bourkelamberticer*as Buckman (S.), 1920, should now be relegated to the *Official Index of Rejected and Invalid Generic Names in Zoology*.
- (4) *Oecotraustes* Waagen, 1869 : When Waagen first published this name, he used two different spellings, namely *Oecotraustes* and *Oekotraustes*. Most subsequent authors have adopted the first of these spellings, which is clearly the more correct. In order to promote uniformity in nomenclatorial practice, it is desirable that the International Commission on Zoological Nomenclature should rule in favour of this spelling, at the same time placing the spelling *Oekotraustes* on the *Official Index of Rejected and Invalid Generic Names in Zoology*.
- (5) *Pleurocer*as Hyatt (A.), 1867 : In the mistaken belief that this name was unavailable by reason of generic homonymy,

Buckman (S.), in 1898 (*Quart. J. geol. Soc.* 54 : 453) replaced it by the name *Paltopleuroceras*, which is therefore an invalid objective synonym. This error was pointed out by Jaworski, 1931 (*Neues Jahrb. für. Min., Beil.-Band* 65 : 86). The name *Paltopleuroceras* has been widely used but not to an extent which would, in my view, justify asking the International Commission to validate it under its Plenary Powers. When the name *Pleuroceras* Buckman is placed on the *Official List*, the name *Paltopleuroceras* should therefore be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*. The type species of the nominal genus *Pleuroceras* Buckman has been used as a zonal index fossil and is therefore of special importance in stratigraphy.

- (6) *Quenstedtoceras* Hyatt, 1877 : When this name was first published, it appeared in the spelling "*Quenstedioceras*". The name of the geologist after whom this genus was named was, however, Quenstedt. It is evident, therefore, that the original spelling (quoted above) was due to a printer's error or to a slip of the pen on the part of Hyatt in 1877. The original error was first detected by Pompeckj in 1899 (*Cape Flora* : 96) ; in the following year it was silently corrected to "*Quenstedtoceras*" by Hyatt himself (1900, in Eastman's *Zittel, Textb. Paleont.* 1 : 580). Since then the corrected spelling has been generally used in the English-speaking countries (see Arkell, 1939, *Quart. J. Geol. Soc.* 95 : 151). In Continental literature, a third spelling, "*Quenstedticeras*" is generally used, this having been first introduced by Teisseyre in 1889 (*Neues Jahrb. für Min. Beil.-Band* 6 : 148). This was, however, an unwarranted emendation of Hyatt's name, the termination "-oceras", which is open to no objection, having always been used for this name. The error represented by the original spelling clearly falls within the classes of error specified in Article 19 of the *Règles*, and it is accordingly recommended that the International Commission on Zoological Nomenclature, when placing this generic name on the *Official List*, should expressly amend the spelling to *Quenstedtoceras*. It would be desirable that at the same time the erroneous spelling *Quenstedioceras* and also the erroneous spelling *Quenstedticeras* should be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*.
- (7) *Stephanoceras* Waagen, 1869 : Buckman (S.) in 1898 (*Quart. J. geol. Soc.* 54 : 454) changed this name to *Stepheoceras*, on the mistaken assumption that it was invalidated by *Stephanoceros* Ehrenberg, 1832 (*Abh. preuss. Akad. Wiss.* 1831 : 125) (Rotifera) and, as the more recent of the two names, was accordingly invalid. Both the name *Stephanoceras* Waagen and its invalid substitute *Stepheoceras* Buckman are often misused in Continental literature. See Spath, 1944 (*Geol.*

Mag. 81 : 230). The name *Stepheoceras* Buckman, 1898, being an invalid junior objective synonym of *Stephanoceras* Waagen, 1869, should be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* at the same time that Waagen's *Stephanoceras* is placed on the *Official List*. The type species of the genus *Stephanoceras* Waagen has been used as a zonal index fossil and is therefore of special importance in stratigraphy.

4. The following is the list of generic names which it is recommended should now be placed on the *Official List of Generic Names in Zoology*:—

Names recommended for addition to the "Official List of Generic Names in Zoology"

- Agassiceras** Hyatt, 1875, *Proc. Boston Soc. nat. Hist.* 17 : 225 (type species, by selection by Buckman (S.), 1894 (*Geol. Mag.* (4) 1 : 361) : *Ammonites scipionianus* d'Orbigny, 1844, *Pal. française*, Terr. jurass. : 207, pl. 51, figs. 7, 8) (gender of generic name : neuter).
- Angulaticeras** Quenstedt, 1883, *Ammoniten schwäb. Jura* : 26 (type species, by selection by Lange, 1924 (*Jahrb. preuss. geol. Landesanst.* 44 : 176) : *Ammonites lacunatas* Buckman (J.), 1844, *Geol. Cheltenham* : 105) (gender of generic name : neuter).
- Asteroceras** Hyatt, 1866, *Bull. Mus. comp. Zool.* 3 : 78, 80 (type species, by selection by Buckman (S.), 1911 (*Type Ammonites* 1 : v) : *Ammonites stellaris* Sowerby (J.), 1815, *Min. Conch.* 1 : 211, pl. 93) (gender of generic name : neuter).
- Bigotites** Nicolesco, 1918, *C. R. Sommaire Soc. géol. France* (4) 18 : 36 (type species, by selection by Nicolesco, 1931 (*Mém. Soc. géol. France* 17 : 23) : *Bigotella petri* Nicolesco, 1917, *Bull. Soc. géol. France* (4) 16 : 167, pl. 4, figs. 4, 5) (gender of generic name : masculine).
- Cadoceras** Fischer, 1882, *Manuel Conchyl.* : 394 (type species by selection by Arkell in the present application : *Ammonites sublaevis* Sowerby (J.), 1814, *Min. Conch.* 1 : 117, pl. 54) (gender of generic name : neuter).
- Cadomites** Munier-Chalmas, 1892, *Bull. Soc. géol. France* (3) 20 C. R. : clxx (type species, by original designation : *Ammonites deslongchampsii* (DeFrance MS) d'Orbigny, 1846, *Pal. française*, Terr. jurass. : 405, pl. 138, figs. 1, 2) (gender of generic name : masculine).
- Coroniceras** Hyatt, 1867, *Bull. Mus. comp. Zool.* 3 : 77 (type species, by selection by Bonarelli, 1900 (*Pal. ital.* 5 : 58) : *Ammonites kridion* Hehl, in Zieten, [1830], *Verstein. Württemb.* (1) : 4, pl. 3, fig. 2) (gender of generic name : neuter).

- Echioceras** Bayle, 1878, *Explic. Carte géol. France* 4 : explic. pl. 77, figs. 2, 3 (type species, by monotypy : *Ammonites raricostatus* Zieten, [1831], *Verstein. Württemb.* (3) : 18, pl. 13, fig. 4) (gender of generic name : neuter).
- Garantiana** Mascke, 1907, *Die Stephanoceras-Verwandt. Coronatensch. Nord-deutschl.* : 24, 34 (type species, by original designation : *Ammonites garantianus* d'Orbigny, 1846, *Pal. française*, Terr. jurass. : 377, pl. 123) (gender of generic name : feminine).
- Lamberticeras** Buckman (S.), 1920, *Type Ammonites* 3 : 14, pl. 154 (type species, by original designation : *Ammonites lamberti* Sowerby (J.), 1819, *Min. Conch.* 3 : 73, pl. 242, figs. 1—3) (gender of generic name : neuter).
- Ludwigella** Buckman (S.), 1901, *Proc. Cotteswold Nat. Field Club* 13 : 266 (type species, by monotypy : *Ammonites concavus* Sowerby (J.), 1815, *Min. Conch.* 1 : 214, pl. 94 (holotype refigured by Buckman (S.), 1887, *Mon. Inf. Ool. Ammonites* : pl. 2, figs. 6, 7)) (gender of generic name : feminine).
- Oecostrustes** Waagen, 1869, in Benecke's *Geognost.-Pal. Beiträge* 2 : 251 (type species, by selection by Munier-Chalmas, 1892 (*Bull. Soc. géol. France* (3) 20 C. R. : clxxi) : *Oecotraustes genicularis* Waagen, 1869, in Benecke's *Geognost.-Pal. Beiträge* 2 : 227, pl. 20, figs. 4a—c) (gender of generic name : masculine).
- Oppelia** Waagen, 1869, in Benecke's *Geognost.-Pal. Beiträge* 2 : 200 (type species, by selection by Douvillé (H.), 1884 (*Bull. Soc. géol. France* (3) 13 : 32) : *Ammonites subradiatus* Sowerby (J. de C.), 1823, *Min. Conch.* 5 : 23, pl. 421, fig. 2) (gender of generic name : feminine).
- Phlyseogrammoceras** Buckman (S.), 1901, *Proc. Cotteswold Nat. Field Club* 13 : 266 (type species, by monotypy : *Ammonites dispansus* Lycett, 1860, *Proc. Cotteswold Nat. Field Club* 2 : 146 (holotype refigured by Buckman (S.), 1922, *Type Ammonites* 4 : pl. 340)) (gender of generic name : neuter).
- Pleuroceras** Hyatt, 1867, *Bull. Mus. comp. Zool.* 1 : 89 (type species, by selection by Fischer, 1882 (*Manuel Conchyl.* : 388) : *Ammonites spinatus* Bruguière, 1789, *Ency. méth.* (Vers) : 40) (gender of generic name : neuter).
- Pseudogrammoceras** Buckman (S.), 1901, *Proc. Cotteswold Nat. Field Club* 13 : 266 (type species, by monotypy : *Ammonites struckmanni* Denckmann, 1887, *Fauna Doernten, Abh. geol. Specialkarte Preussen* 8 : 72, pl. iii. fig. 1) (gender of generic name : neuter).
- Pseudoperisphinctes** Schindewolf, 1923, *Centralbl. Min.* 23 : 346 (type species, by monotypy : *Perisphinctes rotundatus* Roemer (J.), 1911, *Fauna Aspidoides-Schichten Lechstedt*, Inaug.-Dissert. Göttingen : 44, pl. 8, fig. 2, as defined by the selection of a lectotype by Arkell, 1950 (*J. Palaeont.* 24 : 363)) (gender of generic name : masculine).

- Psiloceras** Hyatt, 1867, *Bull. Mus. comp. Zool.* **3** : 72 (type species, by selection by Spath, 1924 (*Proc. geol. Assoc.* **35** : 191) : *Ammonites planorbis* Sowerby (J. de C.), 1824, *Min. Conch.* **5** : 69, pl. 448, fig. 1) (gender of generic name : neuter).
- Quenstedtoceras** (emend. of *Quenstedioceras*) Hyatt, 1877, *Proc. Boston nat. Hist. Soc.* **18** : 391 (type species, by monotypy : *Ammonites leachi* Sowerby (J.), 1819, *Min. Conch.* **3** : 73, pl. 242, fig. 4) (gender of generic name : neuter).
- Sigaloceras** Hyatt, 1900, in Eastman's Zittel, *Textb. Pal.* **1** : 587 (type species, by original designation : *Ammonites calloviensis* Sowerby (J.), 1815, *Min. Conch.* **2** : 3, pl. 104) (gender of generic name : neuter).
- Stephanoceras** Waagen, 1869, in Benecke's *Geognost.-Pal. Beiträge* **2** : 248 (type species, by selection by Buckman (S.), 1898 (*Quart. J. geol. Soc.* **54** : 454) : *Ammonites humphriesianus* Sowerby (J. de C.), 1825, *Min. Conch.* **5** : 161, pl. 500, fig. 1) (gender of generic name : neuter).

5. The trivial names of the type species of the genera specified in the preceding paragraph are all valid names, and each is the oldest available name for the species concerned. It is recommended that these trivial names, as listed below, should now be placed on the *Official List of Specific Trivial Names in Zoology*:—

Names recommended for addition to the "Official List of Specific Trivial Names in Zoology"

- calloviensis** Sowerby (J.), 1815, *Min. Conch.* **2** : 3, pl. 104, as published in the binominal combination *Ammonites calloviensis*.
- concaus** Sowerby (J.), 1815, *Min. Conch.* **1** : 214, pl. 94, as published in the binominal combination *Ammonites concaus*.
- deslongchampsii** (Defrance MS), d'Orbigny, 1846, *Pal. française*, Terr. jurass. : 405, pl. 138, figs. 1, 2, as published in the binominal combination *Ammonites deslongchampsii*.
- dispansus** Lycett, 1860, *Proc. Cotteswold Nat. Field Club* **2** : 146, as published in the binominal combination *Ammonites dispansus*.
- garantianus** d'Orbigny, 1846, *Pal. française*, Terr. jurass. : 377, pl. 123, as published in the binominal combination *Ammonites garantianus*.
- genicularis** Waagen, 1869, in Benecke's *Geognost.-Pal. Beiträge* **2** : 227, pl. 20, figs. 4a—c, as published in the binominal combination *Oecotraustes genicularis*.
- humphriesianus** Sowerby (J. de C.), 1825, *Min. Conch.* **5** : 161, pl. 500, fig. 1, as published in the binominal combination *Ammonites humphriesianus*.

- kridion** Hehl in Zieten, [1830], *Verstein. Württemb.* (1) : 4, pl. 3, fig. 2, as published in the binominal combination *Ammonites kridion*.
- lacunatus** Buckman (J.), 1844, *Geol. Cheltenham* : 105, as published in the binominal combination *Ammonites lacunatus*.
- lamberti** Sowerby (J.), 1819, *Min. Conch.* 3 : 73, pl. 242, figs. 1—3, as published in the binominal combination *Ammonites lamberti*.
- leachi** Sowerby (J.), 1819, *Min. Conch.* 3 : 73, pl. 242, fig. 4, as published in the binominal combination *Ammonites leachi*.
- petri** Nicolesco, 1917, *Bull. Soc. géol. France* (4) 16 : 167, pl. 4, figs. 4, 5, as published in the binominal combination *Bigotella petri*.
- planorbis** Sowerby (J. de C.), 1824, *Min. Conch.* 5 : 69, pl. 448, fig. 1, as published in the binominal combination *Ammonites planorbis*.
- raricostatus** Zieten, [1831], *Verstein. Württemb.* (3) : 18, pl. 13, fig. 4, as published in the binominal combination *Ammonites raricostatus*.
- rotundatus** Roemer (J.), 1911, *Fauna Aspidoides-Schichten Lechstedt*, Inaug. Dissert. Göttingen : 44, pl. 8, fig. 2, as published in the binominal combination *Perisphinctes rotundatus*.
- scipionianus** d'Orbigny, 1844, *Pal. française*, Terr. jurass. : 207, pl. 51, figs. 7, 8, as published in the binominal combination *Ammonites scipionianus*.
- spinatus** Bruguière, 1789, *Ency. méth.* (Vers) : 40, as published in the binominal combination *Ammonites spinatus*.
- stellaris** Sowerby (J.), 1815, *Min. Conch.* 1 : 211, pl. 93, as published in the binominal combination *Ammonites stellaris*.
- struckmanni** Denckmann, 1887, *Fauna Doernten, Abh. geol. Spezialkarte Preussen* 8 : 72, pl. 3, fig. 1, as published in the binominal combination *Ammonites struckmanni*.
- sublaevis** Sowerby (J.), 1814, *Min. Conch.* 1 : 117, pl. 54, as published in the binominal combination *Ammonites sublaevis*.
- subradiatus** Sowerby (J. de C.), 1823, *Min. Conch.* 5 : 23, pl. 421, fig. 2, as published in the binominal combination *Ammonites subradiatus*.

6. The recommendations which I therefore now submit to the International Commission on Zoological Nomenclature are that it should :—

(1) declare that under Article 19 :—

- (a) the correct spelling of the generic name published by Waagen in 1869 both as *Oecotraustes* and as *Oekotraustes* is *Oecotraustes*;

- (b) the correct spelling of the generic name published by Hyatt in 1877 as *Quenstedioceras* is *Quenstedtoceras*;
- (2) place on the *Official List of Generic Names in Zoology* the twenty-one generic names specified in paragraph 4 of the present application ;
- (3) place on the *Official List of Specific Trivial Names in Zoology* the twenty-one trivial names specified in paragraph 5 of the present application ;
- (4) place the under-mentioned names or alleged names on the *Official Index of Rejected and Invalid Generic Names in Zoology*:—
- (a) *Bourkelamberticeras* Buckman (S.), 1920 (an objective junior synonym of *Lamberticeras* Buckman (S.), 1920) ;
 - (b) *Garantia* Rollier, 1909 (an unjustified emendation of *Garantiana* Mascke, 1907) ;
 - (c) *Garantiana* Hyatt, 1900 (a *nomen nudum*) ;
 - (d) *Lamberticeras* Kilian, 1910 (a *nomen nudum*) ;
 - (e) *Oekotraustes* Waagen, 1869 (an erroneous spelling of *Oecotraustes* Waagen, 1869) ;
 - (f) *Paltopleuroceras* Buckman (S.), 1898 (an objective junior synonym of *Pleuroceras* Hyatt, 1867) ;
 - (g) *Quenstedticeras* Teisseyre, 1889 (an incorrect emendation of the defective form, *Quenstedioceras*, in which the name *Quenstedtoceras* was originally published) ;
 - (h) *Quenstedioceras* Hyatt, 1877 (an erroneous spelling of *Quenstedtoceras* Hyatt, 1877) ;
 - (i) *Stepheoceras* Buckman (S.), 1898 (an objective junior synonym of *Stephanoceras* Waagen, 1869).

APPENDIX

Explanatory notes regarding certain of the generic names proposed to be added to the " Official List of Generic Names in Zoology "

The sign * prefixed before the name of a genus indicates that the type species of that genus has been used as a zonal index fossil and is therefore of special importance in stratigraphy.

* *Agassiceras* Hyatt, 1875 : Although in 1894 he had selected *Ammonites scipionianus* d'Orbigny, 1844, as the type species of this genus, Buckman (S.) later (1909, *Type Ammonites* 1 : ii) sought to change the type species of this genus to *Ammonites striaries* Quenstedt,

1858. See also Buckman, 1924, *op. cit.* 5 : 33. Roman (1938, *Ammonites jurass. crét.* : 102) wrongly gave *Ammonites laevigatus* Sowerby (J. de C.), 1827, as the type species.

Angulaticeras Quenstedt, 1883 : The only originally included species in this genus were *Ammonites lacunatus* Buckman (J.), 1844, and *Ammonites boucaultianus* d'Orbigny, 1844. Buckman (S.) in 1906 (*Proc. Cotteswold Nat. Field Club* 15 : 233) selected as typical of this genus "the group of *Am. lacunatus* Quenstedt". This cannot be accepted as the selection of a type species under Rule (g) in Article 30 "rigidly construed". Accordingly, the first valid type-selection for this genus is that cited in the present application, namely that by Lange (1924).

* *Asteroceras* Hyatt, 1866 : As stated in the application, the first type-selection for this genus was that of *Ammonites stellaris* Sowerby (J.), 1815, by Buckman (1911). Roman, 1938 (*Ammonites jurass. crét.* : 91) was therefore in error when he stated that *Ammonites obtusus* Sowerby (J.), 1817, was the type species.

Bigotites Nicolesco, 1918 : Roman (overlooking the action by Nicolesco in 1931) erroneously stated (1938, *Ammonites jurass. crét.* : 240) that *Bigotella haugi* Nicolesco, 1917, was the type species of this genus.

Cadoceras Fischer, 1882 : Fischer cited as sole species of this genus, the pre-1758 name *Nautilites modiolaris* Luidius, 1699 (*Lithophyl. Brit.* : 18, pl. vi, fig. 292), which has commonly been treated by authors as applying to the same species as *Ammonites sublaevis* Sowerby (J.), 1814. The first author to cite nominal species under the generic name *Cadoceras* Fischer appears to have been Nikitin (1884, *Cephalopodenfauna der Jurabildungen des Gouv. Kostroma* : 21), who after stating incorrectly that the generic name *Cadoceras* was chosen by Fischer for *Am. sublaevis* and similar forms of *Stephanoceras* described three species as belonging to this genus and mentioned several others. Under the decision taken by the Thirteenth International Congress of Zoology, when incorporating in the *Règles* a clarified and amended version of the ruling previously given by the Commission in *Opinion* 46 (see 1950, *Bull. zool. Nomencl.* 4 : 159—160, 340), the nominal species cited by Nikitin are alone eligible for selection as the type species of *Cadoceras*. Fortunately, as shown above, *Ammonites sublaevis* Sowerby, which is commonly regarded as representative of *Cadoceras* (through its identification with the *modiolaris* of Luidius) was one of the species cited by Nikitin and is therefore eligible for selection as the type species of this genus. Neither Nikitin nor Pompeckj (1899) nor any subsequent author has, so far as I can ascertain, ever selected a type species for *Cadoceras* Fischer. Accordingly, in order to regularise existing practice, I have now (: 224) selected *Ammonites sublaevis* Sowerby, 1814 (= *Cadoceras sublaeve* (Sowerby (J.), 1814)) to be the type species of *Cadoceras* Fischer, 1882.

Cadomites Munier-Chalmas, 1892 : This generic name has been wrongly used in many French works for the genus, the correct name of which is *Stephanoceras* Waagen, 1869 (q.v.). The lectotype of *Ammonites deslongchampsii* d'Orbigny, 1846 (the type species of this genus) was refigured in 1909 (*Palaeont. univ.* 1909 : pl. 132).

Coroniceras Hyatt, 1867 : As stated in the present application, Bonarelli in 1900 selected *Ammonites kridion* Hehl, 1830, as the type species of this genus. The later action by Buckman (S.) (1911, *Type Ammonites* 1 : vi) in so selecting *Ammonites coronaries* Quenstedt, 1858, was therefore invalid. It has however, led to some misuse of the generic name *Coroniceras*.

* *Echioceras* Bayle, 1878 : The type species of this genus is (as stated in the present application) *Ammonites raricostatus* Zieten, [1831], by monotypy. Buckman (S.) (1914, *Type Ammonites* 2 : ix) was therefore in error when he stated that the type species was *Echioceras raricostatoides* Vadasz, 1908, this being the name of the species erroneously figured by Bayle as *Echioceras rarecostatum* [sic] (Zieten). This action by Buckman has led to some confusion in later works.

* *Ludwigella* Buckman (S.), 1901 : Although the type species of this genus is *Ammonites concavus* Sowerby (J.), 1815, by monotypy, Buckman twice later attempted invalidly to change the type species (1904, *Mon. Inf. Ool. Amm.*, Suppl. : lxxxiv ; 1923, *Type Ammonites* 4 : 56).

Oppelia Waagen, 1869 : The type species of this genus is (as stated in the present application) *Ammonites subradiatus* Sowerby (J. de C.), 1823, by selection by Douvillé (H.) in 1884. The later action by Buckman (S.) (1920, *Type Ammonites* 3 : 25) in selecting one of Waagen's figured specimens as "genolectype" was therefore invalid.

* *Phlyseogrammoceras* Buckman (S.), 1901 : Although (as stated in the present application) the type species of this genus is *Ammonites dispansus* Lycett, 1860, Buckman (S.) erroneously attempted (1904, *Mon. Inf. Ool. Amm.*, Suppl. : cliv) to change the type species to *Ammonites metallarius* Dumortier, 1874.

* *Pseudogrammoceras* Buckman (S.), 1901 : This is another monotypical genus (type species : *Ammonites struckmanni* Denckmann, 1887), the type species of which Buckman later (1904, *Mon. Inf. Ool. Amm.*, Suppl. : cxliii) attempted incorrectly to alter.

* *Pseudoperisphinctes* Schindewolf, 1923 : This case is similar to that of *Pseudogrammoceras*, Schindewolf in 1925 (*Neues Jahrb. für Min.* 1925 : 319) attempting to alter the type species.

* *Psiloceras* Hyatt, 1867 : Buckman (S.) (1924, *Type Ammonites* 5 : 34) criticised Spath's action in the same year in selecting *Ammonites planorbis* Sowerby (J. de C.), 1824, and erroneously rejected that action, arguing that *Ammonites psilonotus* Quenstedt, 1845, was the type species by virtual tautonymy.

* *Sigaloceras* Hyatt, 1900 : This is a case where the original author of the generic name designated a type species, citing, for this purpose, a specific name (*Ammonites calloviensis*) previously published by Sowerby (J.) in 1815, but attributing it to another author (d'Orbigny). The specimens treated by d'Orbigny as belonging to Sowerby's species have not yet been examined and it is therefore not known whether they were correctly determined. In any case, authors have treated Sowerby's species as being the type species of this genus (thereby conforming to the requirements of *Opinions* 65 and 168, the decisions in which were confirmed by the Thirteenth International Congress of Zoology in Paris in 1948—see *Bull. zool. Zool.* 4 : 158—159). Accordingly, there are in this case no grounds for asking the International Commission to change the type species.

II.—THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application : On receipt of Dr. Arkell's application, the question of adding a block of generic names of ammonites to the *Official List of Generic Names in Zoology* was allotted the Registered Number Z.N.(S.) 477.

3. Publication of the present application : The present application was sent to the printer in March 1951 and it was published on 4th May 1951 in Triple-Part 6/8 of volume 2 of the *Bulletin of Zoological Nomenclature* (Arkell, 1951, *Bull. zool. Nomencl.* 2 : 224—233).

4. Support received for the present application : The publication of Dr. Arkell's application in the *Bulletin of Zoological Nomenclature* elicited support from the following specialists :—(a) Dr. D. T. Donovan (*University of Bristol, Department of Geology, Bristol*), (b) the Joint Committee on Zoological Nomenclature for Paleontology in America.

5. Support received from Dr. D. T. Donovan (University of Bristol, Department of Geology, Bristol) : In a letter dated 28th May 1951, which was mainly concerned with other applications submitted by Dr. Arkell in regard to the names of ammonites, Dr. D. T. Donovan (*University of Bristol, Department of Geology, Bristol*) indicated his support as follows for the present application :—" Bull., vol. 2, p. 224. *Addition of names to the " Official List "* (Z.N.(S.) 477). I propose to employ such of these names as concern my own work in their properly defined sense, as given by Dr. Arkell ".

6. Support received from the Joint Committee on Zoological Nomenclature for Paleontology in America : On 9th April 1952 there was received a large number of letters commenting on various applications previously published in the *Bulletin of Zoological Nomenclature* from Professor G. Winston Sinclair (then of the *University of Michigan, Ann Arbor, Michigan, U.S.A.*), Chairman of the Joint Committee on Zoological Nomenclature for Paleontology in America. Included among these was a letter, reporting that the Committee supported the present application by nine votes to one. The foregoing letter was dated 18th February 1952, and its late receipt was apparently due to a decision to defer the despatch to the Commission of the letters containing comments by members of the Joint Committee until all the letters in question had been prepared. By the date on which this letter was received, the Prescribed Period of Public Notice had expired and the Voting Paper (V.P.(52)29) had been prepared. It was therefore impossible to include in that Voting Paper a reference to Professor Sinclair's letter, but, when the Voting Paper was despatched (on 24th April), a supplementary sheet containing the particulars furnished by Professor Sinclair was issued to the Members of the Commission, who were thus placed in possession of the views of the members of the Joint Committee at the same time that they received the Voting Paper relating to the present case. The following is the text of Professor Sinclair's letter :—

The Joint Committee on Zoological Nomenclature for Paleontology in America has considered this subject and I wish to inform you that, being polled, they voted : To support the petition (nine) :—(1) Katherine V. W. Palmer ; (2) A. Myra Keen ; (3) Siemon W. Muller ;

(4) John B. Reeside, Jr. ; (5) Don L. Frizzell ; (6) J. Marvin Weller ; (7) Bryan Patterson ; (8) Bobb Schaeffer ; (9) G. Winston Sinclair. To oppose the petition (one) :—John W. Wells.

In voting to support the petitions some members of the committee made it clear that their support was based on an assumption that the brief as presented was correct. Mrs. Palmer thinks that the authorship of *Pleuroceras* was wrongly ascribed in the published brief.

III.—THE DECISION OF THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

7. Issue of Voting Paper V.P.(52)29 : On 24th April 1952, a Voting Paper (V.P.(52)29) was issued in which the Members of the Commission were invited to vote either for, or against, the proposal for “ the *Official Lists* and *Official Indexes* of certain ammonite names and matters incidental thereto, as specified in Points (1) to (4) in paragraph 6 on page 230 of volume 2 of the *Bulletin of Zoological Nomenclature* [i.e. in paragraph 6 of the application reproduced in the first paragraph of the present *Opinion*].

8. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 24th July 1952.

9. Particulars of the Voting on Voting Paper V.P.(52)29 : The state of the voting on Voting Paper V.P.(52)29 at the close of the Prescribed Voting Period was as follows :—

(a) *Affirmative Votes had been given by the following seventeen (17) Commissioners (arranged in the order in which Votes were received):*

Calman ; Hering ; Dymond ; Esaki ; do Amaral ; Hankó ; Bonnet ; Lemche ; Vokes ; Cabrera ; Pearson ; Boschma ; Stoll ; Bradley ; Hemming ; Mertens ; Riley ;

(b) *Negative Votes:*

None ;

(c) *Voting Paper not returned, one (1) :*

Jaczewski.

10. Declaration of Result of Vote : On 25th July 1952, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(52)29, signed a Certificate that the Votes cast were as set out in paragraph 9 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

11. Receipt of additional information regarding the selection of a type species for the nominal genus " Cadoceras " Fischer, 1882 : On 25th March 1954, Dr. W. J. Arkell (the applicant in the present case) reported to the Commission that he had now ascertained that in 1932 Spath (L.F.) had published a statement that *Ammonites sublaevis* Sowerby (J.), 1814, was the type species of the nominal genus *Cadoceras* Fischer, 1882, and therefore that the selection so made anticipated the selection of the same species made by himself in his own application to the Commission. The information so received from Dr. Arkell was reported to the Commission by the Secretary in the following memorandum which was issued on 3rd April 1954 :—

Case of the generic name " Cadoceras " Fischer, 1882

By FRANCIS HEMMING, C.M.G., C.B.E.

(*Secretary to the International Commission on Zoological Nomenclature*)

Among the generic names of ammonites which Dr. W. J. Arkell recommended should be placed on the *Official List of Generic Names in Zoology* (1951, *Bull. zool. Nomencl.* 2 : 224—233) was the name *Cadoceras* Fischer, 1882. The use of this name was well established, but at that time Dr. Arkell had been unable to find in the literature that any previous author had formally selected a type-species for this genus under Rule (g) in Article 30. Accordingly, in the application to the Commission he himself selected *Ammonites sublaevis* Sowerby

(J.), 1814, to be the type species of this genus, thus fixing this generic name for use in its accustomed sense. Dr. Arkell's proposals for the addition of this, and of a number of other, well-known generic names of ammonites to the *Official List* were put to the Commission in 1952 in Voting Paper (52)29. As the result of this vote, these proposals were unanimously approved by the Commission.

2. I have recently been engaged in preparing the *Opinion* required to give effect to the foregoing decision and I have been in correspondence in regard to it with Dr. Arkell. I have now been informed by Dr. Arkell that he has found that, contrary to his belief at the time when he submitted his application, there was already a valid type selection for the foregoing nominal species, namely, by Spath (L.F.) (1932, *Meddelelser om Grønland* 87 (No. 7) : 58), who had selected the same species to be the type species of *Cadoceras*.

3. In these circumstances, it will be necessary in the *Opinion* to be rendered in this case to substitute "Spath (1932)" for "Arkell (1951)" as the reference to the author by whom the type selection for the above genus was first validly made. As no question of principle is involved and we are concerned here only with making a small correction on a question of fact, I might not have considered it necessary to resubmit this case to the Commission, but I am doing so now, because it is necessary also to submit one or two other matters, and I feel that this provides a convenient opportunity for bringing this particular matter to notice.

12. Issue of Voting Paper V.P.(O.M.)(54)2 : Simultaneously with the submission to the Commission on 3rd April 1954 of the memorandum reproduced in the immediately preceding paragraph, a Voting Paper (V.P.(O.M.)(54)2 was issued in which the Members of the Commission were invited to sign the following statement :—

I take note that the type selection for the nominal genus *Cadoceras* Fischer, 1882, by Spath (L.F.) in 1932 of *Ammonites sublaevis* Sowerby (J.), 1814, takes precedence over the selection of the same species by Arkell (1951) the selection stated to be first valid type selection in the application approved by the Commission in its Vote on Voting Paper V.P.(52)29 ; I accordingly agree that the Secretary be authorised and requested to make the foregoing correction when preparing the *Opinion* required to give effect to the decision referred to above.

13. The Prescribed Voting Period for the Voting on Voting Paper V.P.(O.M.)(54)2 : As the foregoing Voting Paper was issued under the One-Month Rule, the Prescribed Voting Period closed on 3rd May 1954.

14. Particulars of the Voting on Voting Paper V.P.(O.M.)(54)2 :
The state of the voting on Voting Paper V.P.(O.M.)(54)2 at the close of the Prescribed Voting Period was as follows :—

(a) *Affirmative Votes had been given by the following seventeen (17) Commissioners (arranged in the order in which Votes were received)*¹ :

Holthuis ; Lemche ; Vokes ; Hering ; Sylvester-Bradley ;
Bonnet ; Dymond ; Mertens ; Cabrera ; Riley ; Esaki ;
Stoll ; Pearson ; Hemming ; Jaczewski ; Bradley (J.C.) ;
Boschma ;

(b) *Negative Votes:*

None ;

(c) *Voting Papers not returned, two (2)*² :

do Amaral ; Hankó.

15. Declaration of Result of Vote on Voting Paper V.P.(O.M.)(54)2 : On 4th May 1954, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(O.M.)(54)2, signed a Certificate that the Votes cast were as set out in paragraph 14 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

16. On 4th May 1954, Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those

¹ The following zoologists who were Members of the International Commission at the time of the issue of Voting Paper V.P.(O.M.)(54)2 were not Members of the Commission at the time of the issue of Voting Paper V.P.(52)29 :—

Mr. P. C. Sylvester-Bradley (*Sheffield University, Sheffield, England*)

Dr. L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*).

² After the close of the Prescribed Voting Period, affirmative votes were received from Commissioners do Amaral and Hankó.

of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(52)29, as amended, in respect of the name *Cadoceras* Fischer, 1882, by its Vote on Voting Paper V.P.(O.M.)(54)2.

17. The original references for the names placed on the *Official List of Generic Names in Zoology* and the *Official List of Specific Names in Zoology* by the Ruling given in the present *Opinion* are as set out in paragraphs 4 and 5 respectively in the application reproduced in the first paragraph of the present *Opinion*.

18. The references for the type selections for the nominal genera, the names of which are added to the *Official List* by the Ruling given in the present *Opinion*, are as set out in paragraph 4 of the application, save as respects the type selection for the nominal genus *Cadoceras* Fischer, 1882. As explained in paragraph 11 of the present *Opinion*, the nominal species *Ammonites sublaevis* Sowerby (J.), 1814, is, as stated in the application, the type species of the foregoing nominal genus, but it was first validly selected as such not by Dr. Arkell in the application which forms the subject of the present *Opinion* but by Spath (L.F.) in 1932 (*Meddelelser om Grønland* 87 (No. 7) : 58).

19. The original references for the names or alleged names placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* by the Ruling given in the present *Opinion* are as follows :—

- Bourkelamberticeras* Buckman (S.), 1920, *Type Ammonites* 3 : 17
Garantia Rollier, 1909, *Arch. Sci. phys. nat. Genève* (4) 28 : 613, 615
Garantiana Hyatt, 1900, in Eastman's *Zittel, Textb. Paleont.* 1 : 583
Lamberticeras Kilian, 1910, *Lethaea geognostica* 3 (No. 1) (Lief 2) : 194
Oekotraustes Waagen, 1869, *Geogn.-pal. Beitr.* 2 (Heft 2) : 251
Paltopleuroceras Buckman (S.), 1898, *Quart. J. geol. Soc.* 54 : 453
Quenstedticeras Teisseyre, 1889, *Neues Jahrb. für Min. Beil.-Band* 6 : 148
Quenstedioceras Hyatt, 1877, *Proc. Boston nat. Hist. Soc.* 18 : 39
Stepheoceras Buckman (S.), 1898, *Quart. J. geol. Soc.* 54 : 454

20. The application dealt with in the present *Opinion* was published in the *Bulletin of Zoological Nomenclature* prior to the establishment of the *Official List of Family-Group Names in Zoology* by the Fourteenth International Congress of Zoology, Copenhagen, 1953. It has not been possible since then to deal with this aspect of the present case. This question is, however, now being examined on a separate File to which the Registered Number Z.N.(S.) 864 has been allotted.

21. At the time of the submission of the application dealt with in the present *Opinion*, the expression prescribed for the second portion of the binomen which constitutes the scientific name of a species was the expression "trivial name" and the *Official List* reserved for recording such names was styled the *Official List of Specific Trivial Names in Zoology*, the word "trivial" appearing also in the title of the *Official Index* reserved for recording rejected and invalid names of this category. Under a decision taken by the Fourteenth International Congress of Zoology, Copenhagen, 1953, the expression "specific name" was substituted for the expression "trivial name" and corresponding changes were made in the titles of the *Official List* and *Official Index* of such names (1953, *Copenhagen Decisions zool. Nomencl.* : 21). The changes in terminology so adopted have been incorporated in the Ruling given in the present *Opinion*.

22. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

23. The present *Opinion* shall be known as *Opinion* Three Hundred and Twenty-Four (324) of the International Commission on Zoological Nomenclature.

DONE in London, this Fourth day of May, Nineteen Hundred and Fifty-Four.

*Secretary to the International Commission
on Zoological Nomenclature*

FRANCIS HEMMING